

Ebi2 (G-12): sc-514342

BACKGROUND

Epstein-Barr virus-induced gene 2 (Ebi2) is a 357 amino acid multi-pass membrane protein. It is expressed in B lymphocytes and lymphoid tissues and may function in the modulation of the immune system. Out of the nine genes that are induced by the Epstein-Barr virus, Ebi2 exhibits the highest levels of upregulation. Ebi2 is a G protein-coupled receptor that signals through the G protein $G_{\alpha i}$. Ebi2 contains seven hydrophobic transmembrane regions and a putative N-linked glycosylation site at its extracellular N-terminus. Ebi2 is believed to be involved in regulating the effects of the Epstein-Barr virus on B lymphocytes. In addition, Ebi2 may play a role mediating normal lymphocyte functions.

REFERENCES

1. Birkenbach, M., et al. 1993. Epstein-Barr virus-induced genes: first lymphocyte-specific G protein-coupled peptide receptors. *J. Virol.* 67: 2209-2220.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 605741. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Cahir-McFarland, E.D., et al. 2004. Role of NF κ B in cell survival and transcription of latent membrane protein 1-expressing or Epstein-Barr virus latency III-infected cells. *J. Virol.* 78: 4108-4119.
4. Knight, J.S., et al. 2005. Epstein-Barr virus latent antigen 3C can mediate the degradation of the retinoblastoma protein through an SCF cellular ubiquitin ligase. *Proc. Natl. Acad. Sci. USA* 102: 18562-18566.
5. Rosenkilde, M.M., et al. 2006. Molecular pharmacological phenotyping of EBL. An orphan seven-transmembrane receptor with constitutive activity. *J. Biol. Chem.* 281: 13199-13208.

CHROMOSOMAL LOCATION

Genetic locus: GPR183 (human) mapping to 13q32.3.

SOURCE

Ebi2 (G-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-24 at the N-terminus of Ebi2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Ebi2 (G-12) is available conjugated to agarose (sc-514342 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514342 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514342 PE), fluorescein (sc-514342 FITC), Alexa Fluor® 488 (sc-514342 AF488), Alexa Fluor® 546 (sc-514342 AF546), Alexa Fluor® 594 (sc-514342 AF594) or Alexa Fluor® 647 (sc-514342 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514342 AF680) or Alexa Fluor® 790 (sc-514342 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514342 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Ebi2 (G-12) is recommended for detection of Ebi2 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Ebi2 siRNA (h): sc-62253, Ebi2 shRNA Plasmid (h): sc-62253-SH and Ebi2 shRNA (h) Lentiviral Particles: sc-62253-V.

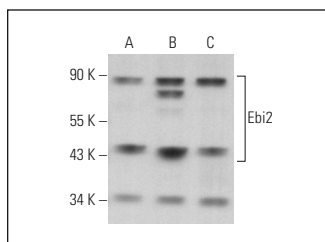
Molecular Weight of Ebi2: 41 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HL-60 whole cell lysate: sc-2209 or U266 whole cell lysate: sc-364800.

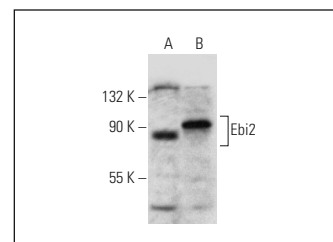
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Ebi2 (G-12): sc-514342. Western blot analysis of Ebi2 expression in HeLa (A), SUP-T1 (B) and HL-60 (C) whole cell lysates.



Ebi2 (G-12): sc-514342. Western blot analysis of Ebi2 expression in U266 (A) and HeLa (B) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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